

## SCHOOL AND CHURCH.

The General Assembly of the Presbyterian Church (Southern) will meet at Charleston, May 20.

Moody and Sankey are on an extended tour for the purpose of obtaining needed rest. They have journeyed as far as Texas, and will soon push toward New Mexico.

Of the 14,000 Methodist Episcopal ministers in this country there are, according to the *Methodist*, only eleven who have plots on their names, and three of these have been condemned unjustly.

The air must have been very bad in a certain unventilated church, when the minister said to the sexton that if such foul air were used for blowing the organ it would put the instrument out of tune.

Wisconsin spent \$2,513,301.83 on her public schools last year. Of the school population of 483,453, 293,286 attended school, leaving nearly 200,000 children without instruction.

A Lutheran preacher of eminence in Berlin complained in a recent sermon that one-third of the scholars in the higher schools of that capital are Jews, though they form only five per cent. of the population.

Now that the subscriptions necessary to pay the debts of the Southern Methodist Publishing house at Nashville have all been taken in, the agent has begun the work of turning them into available cash. The total amount is \$200,000, and it is to be hoped that there will not be much shrinkage.

Mr. Weatherwax, the new State Assessor in New York, says that there is more property under church control in the State than is necessary for strictly religious purposes, and that he does not see why this surplus wealth should be exempt from sustaining its share of the public burden.

Germany spends more money per capita for school education than either England, Austria-Hungary, France, Spain, Italy or Russia. The expenditure is about 70 cents a head of the population; England's, about 44 cents; Austria-Hungary's, about 40 cents; France's, about 36 cents; Spain's, about 32 cents; Italy's about 20 cents; and Russia's, about 6 cents.

A Methodist gentleman who owned a farm of one hundred and twenty-five acres near Rhinebeck, N. Y., has given it for the purpose of building on it a number of cottage homes for worn-out Methodist preachers. The cottages are to be as cozy as possible, thus making the old gentlemen who are to live in them far more comfortable than if they were lodged in the little square rooms of a seven-story asylum in the suburbs of some great city.

The Christians in Armenia appeal to the civilized nations of the world to save them from threatened extermination at the hands of the Turks. They are denied the rights of citizenship, their lands are wrested from them on trifling pretences, their homes are ravaged, and their women treated with the utmost brutality. For all this there is no redress. The Turks call them "Christian dogs," and treat them accordingly. Since the Crimean war the Christian population of Armenia has been reduced one-fourth, and in some of the cities and towns there are no Christians left.

Mr. El. Kery, a native of Samaria, educated in England, and a returned missionary, physician, etc., of France, who reaches back hundreds of years before Christ. He learned that the priest in Christ's time was named Shafier. On searching the Record for some possible note of Jesus' visit, he found instead the following important testimony to his crucifixion: "In the nineteenth year of my priesthood, and the 4,281st year of the world, Jesus of Nazareth, the son of Mary, was crucified at Jerusalem."

## The Rush of "Tenderfeet" to the Colorado Mines.

I found all the hotels at Denver overflowing with pilgrims bound for the mineral regions, and who are rushing in thus early in order to pick up the fortunes which are lying around loose, before somebody else shall get along and gobble them. Canning "early birds" are these fellows; they propose to catch the maternal silver worm before the dew is off the grass, and while other predaceous birds are lazily sleeping in their warm, eastern nests.

And so they are coming; thousands a day, all bound for the mining regions and a fortune. The hotels are full, and the landlords sleep their guests two in a bed, three beds in a room, and, besides, have rented all the vacant bed-rooms in adjacent houses. I was fortunate the first night. Our whilom fellow citizen, David Gage, secured me a bed, in a room a block or so away down the street. There were three beds in the room, and two occupants beside myself—two gold hunters, who all the night long snorted, and snored, as, in their dreams, they dragged the shining ore from its mountain caves, and climbing the tortuous canons in search of further wealth.

Denver has the biggest mine on the continent. It is in the silver dug from the pockets of the onrushing crowds, and which is a more profitable mine than any other which is being worked in the ranges of the "Rockies."

Denver is a smart town—a Chicago on a reduced scale. It is getting on, and will continue to get on without any suggestions from outsiders.

I staid in Denver a few days to get ready for my trip into the mountains. I had various flattering offers to be let into a "sure thing you know," for a mere trifle, and was shown at least four different men who have made their pile in lucky strikes.

The four or five hundreds who have failed to make any strike, and who were hanging around with about one clean shirt and five dollars in cash to each fifty of them, were not pointed out to me. I have found it to be the rule in Denver, and all through the mountains, that the most attention is given to those chaps who struck it rich. There is wanting that attention to the majority—the great crowd of dead-brooks—which one would expect in a democratic community.

At Denver the trains coming in over the Kaunas & Pacific Railway bring each day from three hundred and thirty to four hundred and fifty passengers; ninety per cent. of whom are bound to the mining regions in search of sudden wealth. The trains of the South Park Railway, leading from Denver toward Leadville,

are crammed to the brim—the seats are filled, every berth taken, and men are stretched out in the aisles as thick as swine in cattle-cars. Every stage line which enters in Leadville comes in jammed, coach after coach, scores of them each day, and hacks and other private conveyances to the number of dozens pour out their human contents which they have gathered up at the various railway termini within reach of the Leadville region.

Are these thousands who are daily pouring into the Gunnison and Leadville regions from the Eastern States—are they mad? We shall see in the course of this correspondence.

On the train from Emporia, on which I took passage, the six coaches were crammed to their utmost limit; in the sleeper there were three passengers beside myself. This little fact will afford some indication as to the amount of capital which was represented on the train. During the five hundred miles which divide Emporia from Pueblo, I had opportunity to cultivate the acquaintance of many of those who filled the six coaches. There was a young fellow from somewhere in Illinois who, in company with a party of three others, was bound to the Gunnison region. He was a healthy-looking person of twenty-five, and from his conversation had evidently lived on a farm all his life. I had several conversations with him, which, in no essential respect, differ from a dozen or twenty which I had with others. I said:

"What are you going to do when you get in the Gunnison?"

"O, I don't know. I'm open for anything which will turn up."

"Have you any trade?"

"No, only I understand farming."

"But do you know there is no farming in that mountainous region?"

"No, I don't know much about it. I only know there's silver there, and I'm going out to look for some."

"Did you ever mine any; do you know anything about prospecting, or anything of the kind?"

"No, sir."

I found that the party of four had their fare paid to the town of Gunnison, and that the entire party had remaining less than thirty dollars. They had no blankets, food, mules, picks or outfits of any kind. They were going naked, as it were, to encounter the tremendous hardships of the unsympathizing mountains. Their faces were young, fresh; their eyes eager and hopeful, and I could not bear to overwhelm their hopes by telling them the truth. And, besides, it is doubtful that they would have believed me, if I had told them.

And yet it is certain that untold suffering—starvation, cold, and disease, if not death, awaits these four, and many of the other thousands who are now rushing into the Gunnison country, as it is that night follows upon day.—*Cor. Chicago Times.*

## Winnipeg, Manitoba.

Morning light revealed to us the metropolis of the Northwest. We saw a broad main street bordered with high wooden sidewalks, and rows of shops of every shape and size. Some were rude wooden shanties; others were fine buildings of yellow brick. High over all towered the handsome spire of the Knox Church. Several saw and grist mills sent up incessant puffs of white steam into the clear air. The street was full of bustle and life. There were wagons of all descriptions standing before the stores. Long lines of Red River carts were loading with freight for the interior. The sidewalks were filled with a miscellaneous crowd of people: German peasants, the women in dark blue gowns and head kerchiefs, the men marked by their little flat caps; French half-breeds, with jaunty buckskin jackets, many-colored scarves around their waists, and their black hair shining with oil; Indians, dark, solemn, gaunt, stalking along in blanket and moccasins; Scotch and English people, looking as they do all the world over, but here, perhaps, a little quicker and more energetic. The middle of the street, though there had been but a single night of rain, was a vast expanse of mud—mud so sticky that the wheels of the wagons driving through it were almost as large as mill-wheels; and when we dared to cross it, we came out on the other side with much difficulty, and feet of elephantine proportions.

The city of Winnipeg, which eight years ago was nothing more than a cluster of houses about the Hudson Bay Company's fort, now contains over seven thousand inhabitants. It is the distributing center for a large region, a place of great business activity, and so situated in relation to the back country and the facilities for transportation that it is sometimes called "the Bleeder's Paradise." It is built on a clay bank at the junction of the Assiniboine with the Red River. The nature of the soil is such that it is difficult to find a good foundation for a house, and many of the larger buildings have settled and cracked.—*Henry Van Dyke, Jr., in Harper's Magazine for May.*

## To Prevent Wheat Smut.

Olmsted Flint, of Delaware County, N. Y., tells the *American Rural Home* how he prevents smut in wheat. "Take a wash tub, fill it half full of water, put in as much salt as will dissolve, then put in the wheat, till it comes within two inches of the top of the brine. Stir the wheat thoroughly, then skim off everything that rises to the top of the brine, turn off the brine, then turn your wheat into a large box, or on the barn floor, sprinkle on air-slaked stone lime and stir with a shovel till the wheat is all coated with the lime; then you can put on common land plaster, and stir the same as you have the lime. It will prevent the lime eating your hands when sowing, and will be beneficial to the wheat. Take the wheat to the field and sow it soon after it is prepared; if you do not, some of the germs may be destroyed by the lime." He has prepared his wheat in that way for upwards of thirty-five years, and has had no trouble with smut. He thinks the same application would be equally good for oats, but would not make the brine more than half as strong as for wheat.

The great problem of life is for each man to do his share of the world's work and keep well.

The most terrific storm of real war in a man's heart rarely flings its fire and foam as high as his lips.

## Planting Orchards.

The first step in starting an orchard is to select the most favorable spot on the farm. It should have a medium position as regards exposure and the influence of the season; it requires furthermore a soil with good natural drainage. Where winters are uniform in temperature and cold spring frosts do not prevail, the main difficulties to guard against are the high winds from the west and north that injure the blossoms and blow off the fruit before it is mature. In such sections of country the situation should be chosen for the orchards where some natural obstacle, as a hill or belt of woods, will break the force of destructive winds, or if this is not possible, a belt or border of rapidly-growing trees should be planted simultaneously with the setting out of the orchard. In other sections where late spring frosts prevail a high location with northern exposure is best; an eastern and southern exposure and low grounds are to be avoided. A cold locality acts as a partial preventive against destruction by late spring frosts, because it keeps the fruit buds back. In some portions of the West, as in Illinois and Wisconsin, fruit trees are liable to be killed by the exceedingly variable winters. In such localities choose elevated dry, firm soil, rich enough to produce a solid, well-matured growth. There is in most sections of country experience enough to be found among neighboring cultivators to guide beginners in deciding the important matter of sites for orchards, and no one should venture to set out a permanent orchard without availing himself of this experience.

As regards soils, bear in mind that peaty or mucky and damp, cold and spongy ones are wholly unfit for fruit orchards of any kind. Apples and pears as a rule thrive best on a dry, deep, substantial soil, between a sandy and a clayey loam, and possessing among its inorganic parts a considerable portion of lime. It is the belief of many farmers that apples grown on clayey soils possess better keeping qualities than those grown on light soils. The most enduring peach orchards are found on dry, sandy loams. Peach trees grown on loose, light sands, with the occasional dressings of good compost, fruit well but do not live long. Generally speaking, the plum delights in a rather stiff clayey loam, though some sorts, as the Mirabelle, succeed well on light soils. The cherry thrives best on a light, dry, warm soil. In orchards where apples, pears, peaches, plums, etc., are planted promiscuously, what is commonly termed a sandy loam with a sandy clay subsoil is best. On such a soil all the hardy fruits will thrive, the conditions being favorable. Under all circumstances the soil of an orchard must possess for most successful results the inorganic substances, such as lime and potash, and a goodly proportion of vegetable mould.

As it is imperative that the soil be deep and in good tilth, the ground designed for an orchard is best plowed the previous season, and again before the trees are set. The season of planting, in reality, may extend any time after the fall of the leaf by frost in autumn, until its reappearance in the spring, provided the ground is not frozen. Spring and fall are, however, the usual seasons, spring being generally conceded to be the best time for setting out the stone fruits. A selection of varieties should be influenced by the wants and circumstances of the grower. Here again the experience and advice of cultivators in the same locality will be of invaluable assistance. Large orchards, for profit, should be made up of well-proved varieties that have been tested in the same locality and soil. Whatever the variety, low, stout trees are to be preferred to tall, slender ones. Especially in elevated and exposed positions are low trees the best. The usual arrangement of orchard trees is in the square form in rows the same distance apart and an equal distance between each other. This is the simplest plan and is most employed in small orchards. An operation of setting which is somewhat complicated, but which gives more space for light and air, is what is called the quincunx. In this the trees of one row are opposite the spaces in the next. In apple orchards thirty feet from tree to tree in all directions is the usual rule. Standard pear trees require about twenty-five feet. Peach trees are preferable at one year old only from the bud and should be set at a distance of say fifteen feet. Standard cherries may be transplanted at one year from the bud and should not be over two years. About twelve feet apart is the distance usually observed for this fruit. Plum trees for orchard standards should be about two years old from the graft, with stems say three feet high; they are usually planted the same distance as peaches. Quinces are advised to be at least two years old, and they may be three from the layer or bud; set them twelve feet apart.

As trees invariably lose some of their roots when taken up from the nursery, it is necessary to treat back the branches at the time of planting, that a proper balance shall exist between the stem and the roots of the tree. The roots ought also to be relieved of all bruised points. The ground having been previously prepared by plowing or trenching, holes should be dug deep and wide enough to admit the roots, which when carefully spread out in natural positions may be filled in with fine earth gently trodden down with the foot, more earth filled in, more tramping down of earth and so on until the excavation is filled. When the trees are large and in exposed positions it is well to fasten them with a stake or two, otherwise this precaution is unnecessary. Cultivators differ in their opinions about the necessity for mulching newly set trees; the practice is nevertheless accompanied with excellent results; it prevents the moisture of the ground from evaporating and maintains a uniformity of heat and moisture conducive to the formation of new roots.—*N. Y. World.*

## Petroleum in Europe.

The owners of American petroleum deposits will before long have to encounter a considerable amount of opposition, in view of the discoveries of this valuable oil on the Continent of Europe, and especially in Hanover and Russia. The beds in the latter country are comparatively boundless, extending for a distance of 1,500 miles along the Caucasian range, from the Caspian to the Black Sea.

At the present time, however, there are but two districts in this large area where any systematic efforts are being made to obtain the petroleum. One is in the valley of the Kubina River (which flows into the Black Sea, where two wells have been sunk by a French company under the superintendence of an American manager; this company has a refinery at Taman. The other and most productive district is near Baku, on the Caspian Sea. Many wells have been sunk here to the depth of 800 feet, having a daily yield of 28,000 barrels of crude petroleum. An extraordinary amount of sand flows out with the oil, and is heaped up near the orifice of the wells in banks at least thirty feet high. Large refineries exist at Baku, though the refined oil at present produced there is not as good as the American oil.

## What Woman May Do.

"A young girl of fine character and sterling principles, of quick intelligence and a good general education, who has been surrounded by refining influences, wishes to become self-supporting. She has no special talent, but may stand as a type of the American girl with 'good advantages.' She is willing to make sacrifices and work hard to fit herself for some definite occupation which she may follow regularly as a means of support, and in which she may have an opportunity to rise through the legitimate process of hard work. She recognizes that teaching is overstocked, and that the popular art schools are not likely to offer the chance she wants. She has a vague ambition (and it is a good one, too) that she may possibly be one of those who shall show that many more occupations have a right to be classed as genteel than has been popularly supposed, for she knows that the worker cannot be the work. Will you tell us through the *Tribune's* column some of the kinds of work that this girl can begin to prepare for, and something about the special preparations required? You may be sure of a multitude of very grateful readers."

To one familiar with the reports of our last census the answer to this question seems very easy. In all the departments of labor mentioned below, and in at least as many more not mentioned, women are now doing good and acceptable work.

Insurance Agents.  
Jewelers.  
Journalists.  
Laundresses.  
Landscape Gardeners.  
Lawyers.  
Merchants of all kinds.  
Manufacturers of all kinds.  
Milliners.  
Printers.  
Proof-readers.  
Pharmacists.  
Physicians.  
Painters.  
Pattern makers.  
Photographers.  
Specialists.  
Stenographers.  
Sculptors.  
Shoemakers.  
Skilled nurses.  
Sewers.  
Translators.  
Taxidermists.  
Teachers of all kinds.  
Typewriters.  
Telegraphers.  
Tailors.  
Upholsters.  
Wood carvers.

There is no reason why women should not serve as apprentices to druggists and pharmacists, and enter that field of industry. They do so in England, successfully. House painting, especially inside work, is something women might do as well as men. It is not as hard work as that done exclusively by women who clean and scrub after the painting and kalsomining is over. The lighter branches of cabinet work are specially suited to feminine skill and strength, to which stair building might be added. Upholstery in many of its branches is a work which women might do to advantage. And it is simply surprising that so few women in this country devote themselves to floriculture and horticulture. It is still that is wanted by women far more than strength. There is no limit to the number of brawny hands that may be hired for a small consideration to carry out the designs of intelligent and active brains. During the late war many and many a farm was carried on by women. It is much easier to ride on a mow than to scrub at the wash tub, and dropping corn or harvesting it is not harder work than farmer's wives are expected to do in the dairy and the kitchen. There are a great many departments of teaching in which the demand for laborers is unsupplied. Kindergarten teachers, especially those who have received the thorough training Frobel prescribed, can find enough to do. Teachers of the methods in use by the Wilson Industrial School in New York of training children in the various domestic industries would find full employment if they were in the market. There should be such teachers in every village and city in the country. There is great need also of teachers of cooking schools like the one established by Miss Corson in this city, where children, servants, ladies and all who wish may learn the culinary art. There is great need in the cities and villages of laundries where mending is part of the work done. It is safe to say that such establishments would be well patronized, not only by homeless clerks and bachelors, but by well-to-do families. With the proper machinery and supervision a comfortable living might be made by this industry. There are plenty who can be hired to do the hard work if they have some one to tell them how and show them the way.

As to situations as bookkeepers, telegraph operators, business clerks, there is no lack for those who are competent to fill them. In a great many business houses in New York women who have mastered the branches taught in our commercial schools hold positions of trust and emolument. But no woman need expect to find success unless she commands it. By thoroughness of preparation, by a perfect mastery of the details of her vocation, by an unflinching determination to do the work required of her, and do it without shirking or flinching or complaining, by these alone can she hope or expect to reach the success she aspires to.—*N. Y. Tribune.*

## Eugenie's Last Day in Paris.

When, on that terrible 4th of September, the mob forced its way into the Palais Bourbon and quelled legal opposition by tumult, it became evident to the Ministers of the Crown that all was lost and that the next thing was to insure the personal safety of the Empress. At two the Princess Clothilde came to say good-bye to her cousin—she was leaving Paris the following day. From time to time the gallant General Millinet, came to ask his Imperial mistress if it were not best to repel by force the mob that was already surging at the very gates of the Palace. The Empress expressly forbade any violence to be used. At half-past three M. Pietri opened the door and said in a low, earnest voice, "Madam, you have only just time."

"Make haste, Madam, make haste," exclaimed at the same moment Prince Metternich and the Chevalier Nigra, who had been watching the movements of the mob below from the window. The Empress went hurriedly into her bedroom, put on a brown waterproof cloak, a round traveling hat covered with a veil of the same color, took a green parasol, began to collect in great haste all the miniatures of the Emperor, of her son, of her sister, the Duchesse D'Albe, and of her niece, and put them into a lapis lazuli box, which, however, in the haste of her flight she was destined to leave behind.

"Make haste, Madam, I hear cries; they are mounting the stairs; they are coming!" cried M. Nigra. Prince Metternich went boldly into the bedroom and took the Empress by the arm.

"Madam, where are you going?" asked M. Chevreton.

"Metternich will tell you," replied the Empress. Then coming back as she was leaving the room, she added, "Say good-bye to my good sisters of charity, whom I was forgetting, and take care of the wounded!" Her first thought, even in the excitement of this terrible moment, was for others.

Every one had, more or less, lost their presence of mind. The Empress left without taking any money with her, although there were about forty thousand francs in the drawers.

As Prince Metternich's coupe was supposed to be stationed in front of the Louvre by the Church of the Saint Germain l'Auxerrois, it was through the famous picture galleries that the Imperial party fled.

At one moment the Empress, seeing from the window the mob rushing into the courts of the Palace, stopped short and said:

"See! It is too late, we must stay! It is too late, we cannot pass!" Prince Metternich, however, hurried her on, exclaiming: "We must, Madam, we must!" At the top of the Egyptian staircase Conti and Conneau and said sadly: "You had better go no further. Something might happen to you." At last they got out of the Palace and reached the street. Unluckily, Prince Metternich's coachman had stationed the Ambassador's coupe on the Quay. The Prince had to get it; but during his absence the mob, increasing every moment, threatened to overwhelm the little knot of persons accompanying the Empress. Suddenly a gamin bawled out: "Tiens! There's the Empress!"

"What little wretch! Do you dare cry 'Vive la Prusse'?" exclaimed M. Nigra, with wonderful presence of mind. Just at that moment a fiacre passed. The Italian Ambassador made a sign for it to stop, and pushed the Empress and Madame Le Breton into it, whispering, "Get in, Madame, get in; we cannot wait for Metternich's brougham." Madame Le Breton gave the first address that came into her head, and the cab rolled rapidly away. The next question was where they were to go? It was necessary to get some money, and obtain a temporary refuge. They went from house to house; all their friends were absent from home. Suddenly a lucky idea struck Madame Le Breton—Dr. Evans, Avenue Malakoff, and the Empress could rely upon his loyalty and devotion. They drove there without delay, and although the Doctor was not at home, took refuge until his return. Two days later a carriage containing Dr. Evans and two ladies, both closely veiled, and one apparently old, tottering and infirm, drove up to the door of the Hotel du Casse, at Deauville. The Doctor alighted and engaged rooms for himself and companions, assuring that he was accompanied by an invalid lady who needed the greatest tranquility and repose. The invalid was apparently too ill to leave her room and her meals were passed through the half-opened door and taken by the young lady. It so happened that Sir John Burgoyne's yacht was lying at that time in the Bassin de Deauville, on the very eve of departure for England. A gentleman casually said one afternoon to a lady, after the table d'hôte:

"You know Sir John Burgoyne very well, I believe?"

"O, yes," was the reply; "I have tea on board his yacht every day."

"Would you mind asking him, then, if he would be kind enough to take charge of some very valuable jewels belonging to a lady of rank, which I want to send in safety to England?" The lady consented, and Sir John readily promised to take charge of the jewels. When this favorable reply was made known to the gentleman who asked the favor, he hesitated for a moment and then said: "Since Sir John is so kind, I am almost tempted to ask him if he would willingly take charge of the lady herself, in case she should want to take refuge in England."

"I have no doubt he would gladly do so," replied Sir John's friend. "I will ask him to-night." When this second request reached Sir John's ears he began to have some inkling of the truth, especially as the gentleman who was so anxious about the welfare of this mysterious lady and her jewels was none other than a Chamberlain of the Empress. Of course he consented to take charge of the lady, and pledged his word as an English gentleman that no harm should come to her.

This was in the evening and the yacht was to leave at early dawn. At about midnight a small party, consisting of two ladies and two gentlemen, came on board, and one lady, throwing back her veil and revealing in the full moonlight one of the most beautiful faces ever given to mortal, said sadly and sweetly:

"I am the Empress. I put myself under the protection of the British flag and under the care of an English gentleman!"

## Sir John bowed his knee.

The following morning, when people rose to stroll to the beach, the yacht was standing boldly out to sea.—*The Whitehall Review.*

## Cotton Possibilities.

"Cotton is king." This was asserted twenty years ago, but the assertion had no foundation in truth, in the sense its authors intended. Nevertheless, both before and since that period, cotton was and is the largest item in the list of exports from this country to foreign countries. One-half of the entire crop of the merchantable cotton of the world is grown in the United States.

The cotton trade is watched more closely than any other. There are daily reports of the amount of cotton received at the centers of distribution, and how much is sold and exported. Great pains are taken to get at the exact facts regarding the supply and consumption of this great staple. As a gentleman once expressed it, a cotton statistician would chase a single bale all over the country to see what finally became of it.

The figures that express the growth and use of cotton are astounding. The best authorities place the production annually at from forty-five to fifty-five hundred million pounds, or from two to one-quarter to two and three-quarters million tons. There is no surplus. What is produced is all used from year to year. Manikand uses an average of fully three pounds of raw cotton every year for every man, woman and child on the face of the globe.

When, however we inquire how much land is needed to raise this vast crop, the reader will be surprised when we say that there is land enough exactly suited to the production of cotton, in the State of Texas alone, to supply the whole world. The average production of cotton in Texas is about one-half a bale to an acre. The highest estimate of the world's crop is 12,000,000 bales, of 480 pounds each. An area of 24,000,000 acres is therefore all that is needed, and that is but 37,500 square miles. The area of Texas is more than seven times that number of miles, and the part that could be profitably devoted to cotton-growing is many times greater in size than would be required.

The cotton that is used for manufacture is the wing of the seed. It corresponds to the light filament that carries the seed of the thistle, that pest of the farmer. There are about two and a half pounds of seed to every one pound of cotton fibre. How much cotton seed, then, is raised every year in the world? Between six and seven million tons!

The uses of cotton seed are many, and yet it is only lately that the great value of the article has been recognized. When pressed, the kernels will yield about one-eighth of their weight in oil, which can be used for many purposes. Indeed, it is more than suspected that a large part of the "pure olive oil" from Leghorn is either pure cotton-seed oil, or a mixture of cotton seed and other oils.

What is left after the oil is expressed is "seed cake." This is sent in vast quantities to Europe, where it forms the best known feed for cattle, and no better fertilizer is known than the manure of cattle fed upon it. The hulls of the cotton seed have usually been thrown away, but now it is known that they are as good for feed as the seed itself.

We are just beginning to use economy in the cultivation of cotton, and in the use of the other products of the plant. The production of cotton is increasing from year to year. The crop of 1879 was the largest ever gathered. But the consumption of the staple is also increasing.

In the United States we consume more than thirteen pounds of raw cotton a year for every person in the country. The average amount for each person in Europe is only four and a half pounds; in Asia, about three pounds; in Africa, less than one-third of a pound. As enlightened civilization extends and wealth increases, the consumption of this article of trade must also grow; and it is the mission of America to supply it to the whole world.—*Youth's Companion.*

## Doctor Mad—A Mania of To-Day.

Mrs. Bolus Solus—Sarah's got a sore throat. Send for the doctor.

Jennie didn't sleep well last night. Send for the doctor. What did he say was the matter with her? O, he says it's nothing very serious. Only a—a—a—and he left a prescription and will call again this evening and charge \$3 for each visit.

Tommy has a cold. Send for the doctor. Doctor says it's nothing serious; prescription, advice, will call again and charge as before.

I'm not very well myself. No appetite, sluggish, etc. Live in the house; don't go out more than once in three days, and then only to do some shopping. The doctor says the liver is out of order. Prescription, advice, more charges, which husband working hard down town will pay.

Tommy has a sore finger. Send for the doctor. Says I must put a rag around it and make a poultice. Charge for another visit.

Jennie had the snuffles last night. I'm so worried. There's scarlet fever in the next street and the measles beyond. Send for the doctor. He says it's nothing serious if only looked after in time. I'm no better, either. He left another prescription. I live in a steam or stove heated room; house poorly ventilated; don't go out much. No. Eat? O, meat and hot cakes, liver and bacon, salt mackerel, fried pork and such things pretty often. Dear me! How can people live and be well without a doctor at work on them all the time? I'm sure I owe my life and those of all our family to the doctor.

The doctor says so. Husband—By George! my doctor's bill last year amounted to half my board bill. It's cheaper to hire or buy a doctor out and out, and be done with it.

Bridget, to Mrs. Bolus Solus—Shure, ma'am, the rag and bottle man is here, and wad ye be after disposing to him of the bottle of empty medicine vials and bottles in the back closet, ma'am. Shure the other bottle is fillin' up fast, too.—*N. Y. Graphic.*

—Add one teaspoonful of corn starch dissolved in milk to your custard pie, bake in moderate oven; it will not be watery. In making puddings from corn starch you can use one-fifth wheat flour without perceiving any difference.